BRUHAT BANGALORE MAHANAGARA PALIKE

MEASUREMENT SHEET

PRE-MEASUREMENT

Name of work: Improvements to Roads and Drains at Yerappa Garden in Ward No. 09 (Vidyaranyapura).

Estimated Cost : Rs. 96.00 Lakhs

Job Code: 009-22-000011

Head of Account : P-0190 Works Sancrioned by Hon. Mayot

Name of Agency: M/s. K. R Constructions, Prop: C. Mahesh, No. 286, 7th B Cross, Jakkur Layout, Bangalore.

Work order No: BBMP/EE/BTP/WO/55/2022-23 Dated: 29-06-2022.

	Measurements Recarded on :	27-03-2023							
Sl No	**Description of work**	**Mesurement**						**Qty.**	**Rate / Unit**
		No.	**L**	**B1**	**B2**	**Av.B**	**D**		
12	Providing, laying, spreading and compacting graded stone aggregate to Wet Mix Macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density								
	For New Road								Cum
	4th Cross Seetharamaiah Layout								
		1	15.00	5.70	5.65	5.68	0.25	21.28	
		1	15.00	5.65	5.60	5.63	0.25	21.09	
		1	15.00	5.60	5.50	5.55	0.25	20.81	
		1	6.10	5.50	5.70	5.60	0.25	8.54	
	3rd Cross								
		1	15.00	3.50	3.20	3.35	0.20	10.05	
		1	15.00	3.20	3.30	3.25	0.20	9.75	
		1	15.00	3.30	4.10	3.70	0.20	11.10	
		1	7.10	4.10	3.00	3.55	0.20	5.04	
	2nd Cross								
		1	15.00	5.70	4.60	5.15	0.25	19.31	
		1	15.00	4.60	5.15	4.88	0.25	18.28	
		1	15.00	5.15	6.00	5.58	0.25	20.91	
		1	9.50	6.00	4.50	5.25	0.25	12.47	
	Total		Total Qty =					**178.64**	

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidyaranyapura Sub Division

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	Measurements Recarded on :	06-04-2023							
13	Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.								
	For New Road								Cum
	Yerappa Garden								
	4th Cross Seetharamaiah Layout	1	2.30	5.30	5.40	5.35		12.31	
		1	15.00	5.80	5.20	5.50		82.50	
		1	15.00	5.20	5.80	5.50		82.50	
		1	15.00	5.80	5.40	5.60		84.00	
		1	15.00	5.40	5.90	5.65		84.75	
		1	15.00	5.90	4.90	5.40		81.00	
		1	15.50	4.90	6.00	5.45		84.48	
	4th Cross Seetharamaiah Layout								
		1	15.00	5.70	5.65	5.68		85.13	
		1	15.00	5.65	5.60	5.63		84.38	
		1	15.00	5.60	5.50	5.55		83.25	
		1	6.10	5.50	5.70	5.60		34.16	
	3rd Cross								
		1	15.00	3.50	3.20	3.35		50.25	
		1	15.00	3.20	3.30	3.25		48.75	
		1	15.00	3.30	4.10	3.70		55.50	
		1	7.10	4.10	3.00	3.55		25.21	
	2nd Cross								
		1	15.00	5.70	4.60	5.15		77.25	
		1	15.00	4.60	5.15	4.88		73.13	
		1	15.00	5.15	6.00	5.58		83.63	
		1	9.50	6.00	4.50	5.25		49.88	
	Total		Total Qty =					**1262.02**	

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Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	Measurements Recarded on :	06-04-2023							
14	Providing and applying Primer Coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using								
	Yerappa Garden								Cum
	4th Cross Seetharamaiah Layout	1	2.30	5.30	5.40	5.35		12.31	
		1	15.00	5.80	5.20	5.50		82.50	
		1	15.00	5.20	5.80	5.50		82.50	
		1	15.00	5.80	5.40	5.60		84.00	
		1	15.00	5.40	5.90	5.65		84.75	
		1	15.00	5.90	4.90	5.40		81.00	
		1	15.50	4.90	6.00	5.45		84.48	
	4th Cross Seetharamaiah Layout								
		1	15.00	5.70	5.65	5.68		85.13	
		1	15.00	5.65	5.60	5.63		84.38	
		1	15.00	5.60	5.50	5.55		83.25	
		1	6.10	5.50	5.70	5.60		34.16	
	3rd Cross								
		1	15.00	3.50	3.20	3.35		50.25	
		1	15.00	3.20	3.30	3.25		48.75	
		1	15.00	3.30	4.10	3.70		55.50	
		1	7.10	4.10	3.00	3.55		25.21	
	2nd Cross								
		1	15.00	5.70	4.60	5.15		77.25	
		1	15.00	4.60	5.15	4.88		73.13	
		1	15.00	5.15	6.00	5.58		83.63	
		1	9.50	6.00	4.50	5.25		49.88	
	Total		Total Qty =					**1262.02**	

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Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	Measurements Recarded on :	06-04-2023							
15	Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all								
	For New Road								Cum
	Yerappa Garden								
	4th Cross Seetharamaiah Layout	1	2.30	5.30	5.40	5.35	0.05	0.62	
		1	15.00	5.80	5.20	5.50	0.05	4.13	
		1	15.00	5.20	5.80	5.50	0.05	4.13	
		1	15.00	5.80	5.40	5.60	0.05	4.20	
		1	15.00	5.40	5.90	5.65	0.05	4.24	
		1	15.00	5.90	4.90	5.40	0.05	4.05	
		1	15.50	4.90	6.00	5.45	0.05	4.22	
	4th Cross Seetharamaiah Layout								
		1	15.00	5.70	5.65	5.68	0.05	4.26	
		1	15.00	5.65	5.60	5.63	0.05	4.22	
		1	15.00	5.60	5.50	5.55	0.05	4.16	
		1	6.10	5.50	5.70	5.60	0.05	1.71	
	3rd Cross								
		1	15.00	3.50	3.20	3.35	0.05	2.51	
		1	15.00	3.20	3.30	3.25	0.05	2.44	
		1	15.00	3.30	4.10	3.70	0.05	2.78	
		1	7.10	4.10	3.00	3.55	0.05	1.26	
	2nd Cross								
		1	15.00	5.70	4.60	5.15	0.05	3.86	
		1	15.00	4.60	5.15	4.88	0.05	3.66	
		1	15.00	5.15	6.00	5.58	0.05	4.18	
		1	9.50	6.00	4.50	5.25	0.05	2.49	
	Total		Total Qty =					**63.10**	

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Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	Measurements Recarded on :	10-04-2023							
16	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications.								
	Yerappa Garden								
	4th Cross Seetharamaiah Layout	1	2.30	5.30	5.40	5.35		12.31	
		1	15.00	5.80	5.20	5.50		82.50	
		1	15.00	5.20	5.80	5.50		82.50	
		1	15.00	5.80	5.40	5.60		84.00	
		1	15.00	5.40	5.90	5.65		84.75	
		1	15.00	5.90	4.90	5.40		81.00	
		1	15.50	4.90	6.00	5.45		84.48	
	4th Cross Seetharamaiah								
		1	15.00	5.70	5.65	5.68		85.13	
		1	15.00	5.65	5.60	5.63		84.38	
		1	15.00	5.60	5.50	5.55		83.25	
		1	6.10	5.50	5.70	5.60		34.16	
	3rd Cross								
		1	15.00	3.50	3.20	3.35		50.25	
		1	15.00	3.20	3.30	3.25		48.75	
		1	15.00	3.30	4.10	3.70		55.50	
		1	7.10	4.10	3.00	3.55		25.21	
	2nd Cross								
		1	15.00	5.70	4.60	5.15		77.25	
		1	15.00	4.60	5.15	4.88		73.13	
		1	15.00	5.15	6.00	5.58		83.63	
		1	9.50	6.00	4.50	5.25		49.88	
	Total							**1262.02**	

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		No.	L	B1	B2	Av.B	D		
	Measurements Recarded on :	10-04-2023							
17	Providing and applying Tack Coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.25 kg/m2 on the prepared bituminous surface cleaned with mechanical broom								
	Yerappa Garden								
	4th Cross Seetharamaiah Layout	1	2.30	5.30	5.40	5.35		12.31	
		1	15.00	5.80	5.20	5.50		82.50	
		1	15.00	5.20	5.80	5.50		82.50	
		1	15.00	5.80	5.40	5.60		84.00	
		1	15.00	5.40	5.90	5.65		84.75	
		1	15.00	5.90	4.90	5.40		81.00	
		1	15.50	4.90	6.00	5.45		84.48	
	4th Cross Seetharamaiah Layout								
		1	15.00	5.70	5.65	5.68		85.13	
		1	15.00	5.65	5.60	5.63		84.38	
		1	15.00	5.60	5.50	5.55		83.25	
		1	6.10	5.50	5.70	5.60		34.16	
	3rd Cross								
		1	15.00	3.50	3.20	3.35		50.25	
		1	15.00	3.20	3.30	3.25		48.75	
		1	15.00	3.30	4.10	3.70		55.50	
		1	7.10	4.10	3.00	3.55		25.21	
	2nd Cross								
		1	15.00	5.70	4.60	5.15		77.25	
		1	15.00	4.60	5.15	4.88		73.13	
		1	15.00	5.15	6.00	5.58		83.63	
		1	9.50	6.00	4.50	5.25		49.88	
	Total							**1262.02**	

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Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	Measurements Recarded on :	13-04-2023							
20	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 m3 in volume and stock piling at designated locations and disposal of dismantled materials and stacking serviceable and unserviceable materials separately MORTH Specification No. 202(PWD SR 2021-22 Vol -III P.No.10 - I.No.2.19)								
	Yarappa Garden								
	Cross Road 1	1	15.00	4.30	3.30	3.80	0.20	11.40	
		1	15.00	3.30	5.50	4.40	0.20	13.20	
		1	3.00	5.50	4.60	5.05	0.20	3.03	
	Cross Road 2	1	13.70	3.75	3.20	3.48	0.20	9.52	
		1	15.00	4.80	5.20	5.00	0.20	15.00	
		1	12.20	5.20	4.90	5.05	0.20	12.32	
	Total							**64.47**	

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Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	Measurements Recarded on :	21-04-2023							
21	Construction of Dry Lean Cement Concrete Sub- base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm,aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/ m3 , optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 t vibratory roller, finishing and curing. MORTH Specification No. 601(PWD SR 2021-22 Vol -III P.No.43 - I.No.6.1)								
	Yarappa Garden								
	Cross Road 1	1	15.00	4.30	3.30	3.80	0.15	8.55	
		1	15.00	3.30	5.50	4.40	0.15	9.90	
		1	3.00	5.50	4.60	5.05	0.15	2.27	
	Cross Road 2	1	13.70	3.75	3.20	3.48	0.15	7.14	
		1	15.00	4.80	5.20	5.00	0.15	11.25	
		1	12.20	5.20	4.90	5.05	0.15	9.24	
	Total							**48.36**	

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